Getting Started with ESX Server 3i Installable

Update 2 and later for

ESX Server 3i version 3.5 Installable and VirtualCenter 2.5

vmware®

Getting Started with ESX Server 3i Installable
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Getting Started with ESX Server 3i Installable

This guide is intended for experienced Windows or Linux system administrators who will be installing VMware ESX Server 3i and will be configuring virtualization for the first time by using VMware Infrastructure 3. Specifically, it is intended for users who:

- Do not yet have the ESX Server 3i software installed.
- Do not yet have the VMware Infrastructure Client or the VMware VirtualCenter Server installed.

This guide describes VMware ESX Server 3i and VirtualCenter and provides instructions for setting up and configuring a host, including the following tasks:

- Installing ESX Server 3i and adding the host to your network.
- Deploying the VI Client and connecting to a single ESX Server 3i host.
- Deploying and running a virtual machine.
- Deploying VMware Infrastructure with the VirtualCenter Server to manage multiple hosts.

About VMware Infrastructure

VMware Infrastructure is a suite of applications that uses virtualization to:

- Run multiple operating systems on a single physical machine simultaneously.
- Reclaim idle resources and balance workloads across multiple physical machines.
- Work around hardware failures and scheduled maintenance.

VMware Infrastructure Components

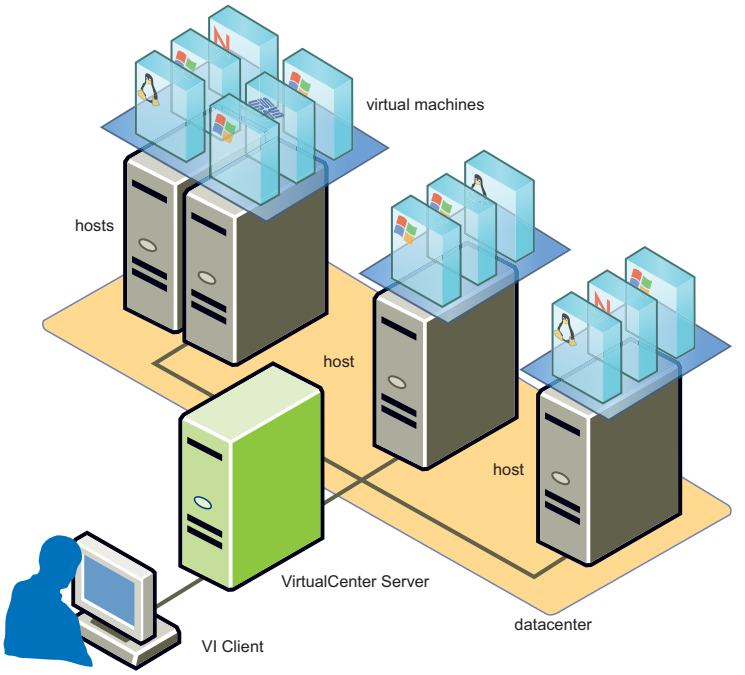
Familiarity with the components that make up a VMware Infrastructure environment helps you understand the setup process and, ultimately, the process of running virtual machines using VMware VirtualCenter. VMware Infrastructure includes the following components:

- **The VMware Infrastructure Client** – The VI Client is the interface to the VirtualCenter Server and hosts. It also provides console access to virtual machines.
- **The VMware VirtualCenter Server** – The VirtualCenter Server unifies resources from individual hosts so that those resources can be shared among virtual machines in the entire datacenter. It accomplishes this by managing the assignment of virtual machines to the hosts and the assignment of resources to the virtual machines within a given host based on the policies set by the system administrator.

  The VirtualCenter Server allows the use of advanced VMware Infrastructure features such as VMware Distributed Resource Scheduler (DRS), VMware High Availability (HA), and VMware VMotion.
- **Datacenter** – A datacenter is a structure under which you add hosts and their associated virtual machines to the VirtualCenter inventory.
- **Host** – A host is a computer that uses the ESX Server 3i virtualization software run virtual machines. Hosts provide CPU and memory resources, access to storage, and network connectivity for virtual machines that reside on them. You must have a host before following the steps in this manual.
- **Virtual Machine** – A virtual machine is a software computer that, like a physical computer, runs an operating system and applications. Multiple virtual machines can run on the same host at the same time. Virtual machines managed by the VirtualCenter Server can also run on a cluster of hosts.

The relationships among the basic components of VMware Infrastructure are shown in Figure 1.

Figure 1. VMware Infrastructure Components



Managing Hosts

There are two primary methods for managing hosts:

- **Single-host management** – Use the VI Client to connect to a single ESX Server 3i host and manage virtual machines and their resources. When the VI Client is connected to an ESX Server 3i, the VI Client displays only the options appropriate to single-host management.
- **Multiple-host management** – Use the VI Client to connect to a VirtualCenter Server and manage many virtual machines and their resources distributed over multiple ESX Server 3i hosts. When connected to a VirtualCenter Server, the VI Client displays all the options available to the VMware Infrastructure environment and for managing multiple hosts.

Deploying a VirtualCenter Server provides many advantages over deploying a single, standalone ESX Server 3i host. Table 1 illustrates some of the key advantages and compares multiple-host management with VirtualCenter versus single-host management.

Table 1. Comparison of Multiple and Single Host Management

Feature	VirtualCenter Server	ESX Server 3i
Scale of deployment	Multiple hosts	Single host
Capacity planning	Built-in	Available separately
Server Consolidation wizard	Built-in	Available separately
Instant server provisioning	Available with templates and cloning	Not available
Zero-downtime maintenance	Possible with VMotion	Not available
Load balancing	Possible with VMware DRS	Not available
Failover	Possible with VMware HA	Not available
Power savings	Possible with VMware Distributed Power Management (DPM)	Not available
Centralized access control	Available with Active Directory Integration	Not available

Installing ESX Server 3i

Use the ESX Server 3i Installable CD-ROM to install ESX Server 3i onto a hard drive (SATA, SAS, or SCSI). This procedure presumes you are using a keyboard and monitor attached to the ESX Server host to perform the installation.

To install ESX Server 3i:

1 Insert the ESX Server 3i Installable CD into the CD drive.

2 Set the BIOS to boot from the CD.

The ESX Server runs through its boot process until the Welcome screen displays.

Welcome to the VMware ESX Server 3i Installation.
Please select the operation you wish to perform.
(ESC) Cancel
(R) Repair
(Enter) Install

If this screen does not display, do the following:

a Reboot the machine.

b Press the key required to enter your machine's BIOS Setup page.

This key is often F1, F2, or F10.

c Set the CD drive as the first boot device.

d Reboot the machine.

3 Press Enter to continue with the Installation.

The text installer steps you through each process of the ESX Server installation. When the installer completes the operation, the Installation Complete screen displays.

4 Remove the CD and reboot the host.

After the host reboots, the direct console screen displays and allows you to set up your ESX Server host configuration, as described in the next section, "Setting Up ESX Server 3i."

For detailed information about installing ESX Server 3i, see the *ESX Server 3i Setup Guide*.

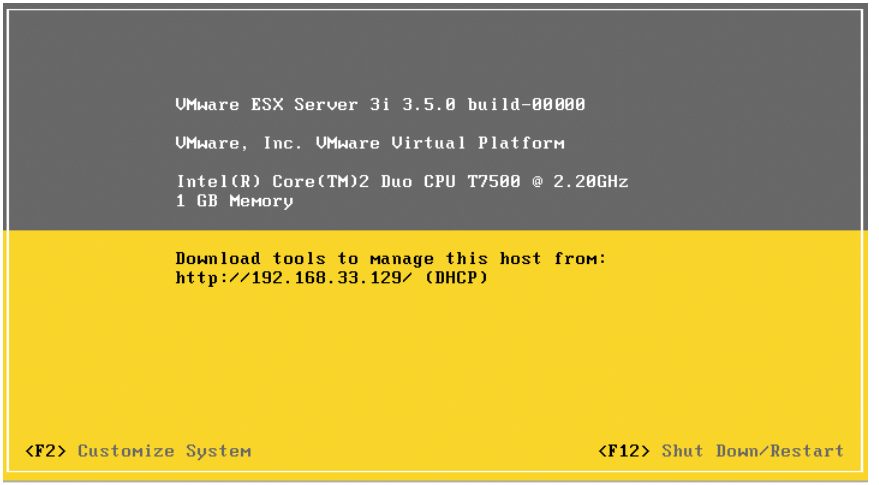
Setting Up ESX Server 3i

VI ClientSetting up ESX Server 3i involves configuring the Administrative (root) password for the ESX Server 3i host and configuring the default networking behavior. Before you begin, make sure you have the following:

- An ESX Server 3i system that is connected to a monitor and keyboard and powered on.
- A network with a DHCP server (optional).
- At least one other computer to act as a management station. This computer must be running Windows, have network access to the ESX Server 3i, and have Internet access.
- The VMware Infrastructure Management Installer CD-ROM.

NOTE In the event that a system failure occurs, you can restore the ESX Server 3i software. Refer to the Setup Guide for your ESX Server 3i product for instructions on recovering ESX Server 3i. If you do not have a copy of this manual, you can obtain one by visiting http://www.vmware.com/support/pubs.

After ESX Server 3i is installed and rebooted for the first time, the system network and storage devices are configured with defaults. After the host completes the boot-up phase, the direct console appears on the attached monitor.


VMware ESX Server 3i 3.5.0 build-00000
VMware, Inc. VMware Virtual Platform
Intel(R) Core(TM)2 Duo CPU T7500 @ 2.20GHz
1 GB Memory
Download tools to manage this host from:
http://192.168.33.129/ (DHCP)
<F2> Customize System
<F12> Shut Down/Restart

Using a keyboard attached to the host, press **F2** to examine the default configuration. As the system administrator, you may want to make changes to the default configuration, such as creating the administrator password or setting the static IP address. VMware recommends that you configure your administrative access settings and server network for the purpose of the VMware Infrastructure evaluation.

Configuring the Administrative Password

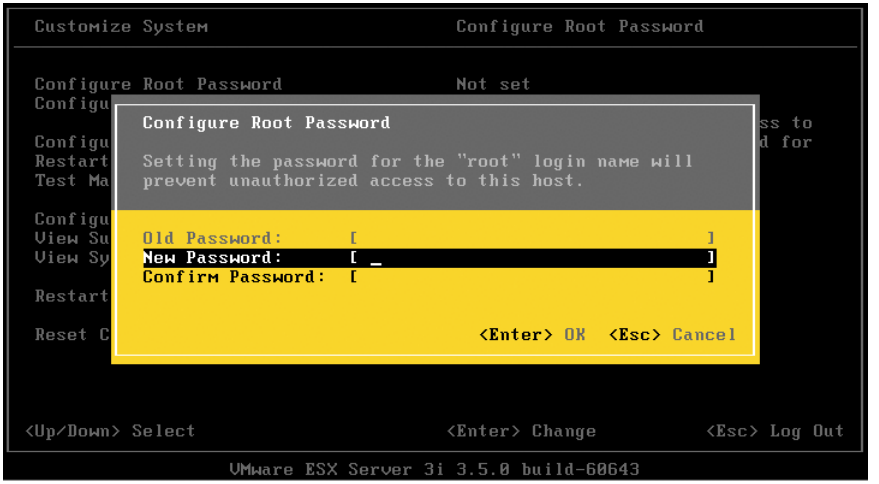
The administrative username for the ESX Server 3i host is **root**. By default, the administrative password is *null*, meaning there is no administrative password.

To create an administrative password

1 From the direct console, press **F2**.

2 Select **Configure Root Password**.

3 When prompted for the old password, press **Enter**.



4 Enter a new password and press **Enter**.

5 Confirm the password and press **Enter**.

The root password is created.

Configuring the Management Network

The default behavior for networking is for DHCP (Dynamic Host Configuration Protocol) to configure the IP address. You can choose from the following options for accepting or making changes to the default network settings:

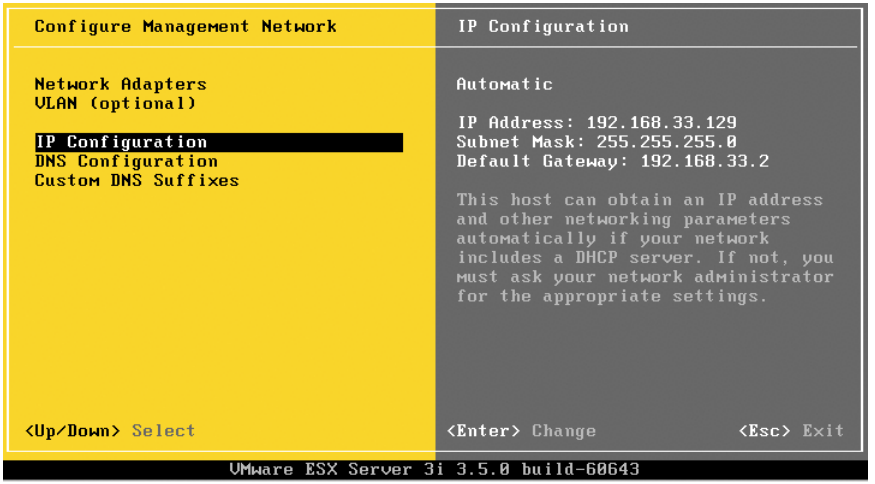
- Accept the DHCP-configured IP settings and proceed to use the VI Client to connect to the ESX Server 3i host.
- Override the DHCP-configured IP address by configuring a static IP address using the direct console.

Write down the IP address for the ESX Server 3i host. You will need the IP address when you connect to the host using the VI Client.

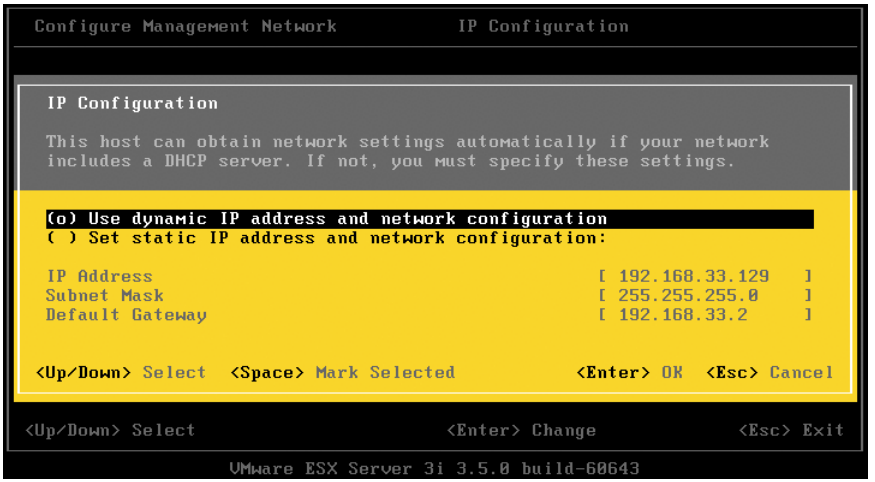
To configure static IP settings using the direct console

1 From the direct console, press the down-arrow key to select **Configure Management Network** and press **Enter**.

2 Press the down-arrow to select **IP Configuration** and press **Enter**.


Configure Management Network
IP Configuration
Network Adapters
VLAN (optional)
IP Configuration
DNS Configuration
Custom DNS Suffixes
Automatic
IP Address: 192.168.33.129
Subnet Mask: 255.255.255.0
Default Gateway: 192.168.33.2
This host can obtain an IP address and other networking parameters automatically if your network includes a DHCP server. If not, you must ask your network administrator for the appropriate settings.
<Up/Down> Select
<Enter> Change
<Esc> Exit
VMware ESX Server 3i 3.5.0 build-60643

3 Press the down-arrow to highlight **Set static IP address and network configuration**.


Configure Management Network
IP Configuration
IP Configuration
This host can obtain network settings automatically if your network includes a DHCP server. If not, you must specify these settings.
(o) Use dynamic IP address and network configuration
( ) Set static IP address and network configuration:
IP Address [192.168.33.129]
Subnet Mask [255.255.255.0]
Default Gateway [192.168.33.2]
<Up/Down> Select <Space> Mark Selected <Enter> OK <Esc> Cancel
<Up/Down> Select
<Enter> Change
<Esc> Exit
VMware ESX Server 3i 3.5.0 build-60643

4 Press the spacebar to select the highlighted item.

5 Press the down-arrow key to select **IP Address**.

6 Press the Backspace key to delete the current IP address.

7 Enter a new IP address.

8 Press the down-arrow key to select **Subnet Mask**.

9 Press the Backspace key to delete the current subnet mask.

10 Enter a new subnet mask.

11 Press the down-arrow key to select **Default Gateway**.

12 Press the Backspace key to delete the current default gateway.

13 Enter a new default gateway.

14 Retype the new password and press Enter to save the password configuration.

If you configure static IP address networking for your ESX Server 3i host, you also need to configure static DNS information, including a host name, a primary name server, a secondary name server, and DNS suffixes. To configure DNS settings, select **Configure Management Network** from the direct console and specify your DNS server addresses and hostname.

Managing Your First ESX Server 3i Host

After you complete initial setup of your host machine, you can install the software needed to manage ESX Server 3i. For your first evaluation experience, you will install the VI Client to manage a single host.

VI ClientUse the VMware Infrastructure Management Installer CD-ROM to install the VI Client on a desktop or laptop computer that is to be used as a management station. If you did not purchase the VMware Infrastructure Management software, use the VI Client package downloaded onto your host during the ESX Server 3i installation or an evaluation copy downloaded from the VMware Download Center.

The VI Client must be installed on a Windows machine that has network access to the ESX Server 3i host. The management station must also have Internet access.

Before You Begin

Before you begin, be sure your system meets these VI Client requirements.

Hardware Requirements

The VI Client hardware must meet the following requirements:

- **Processor** – 266MHz or higher Intel or AMD x86 processor (500MHz recommended).
- **Memory** – 256MB RAM minimum, 512MB recommended.

- **Disk Storage** – 150MB free disk space required for basic installation. You must have 55MB free on the destination drive for installation of the program, and you must have 100MB free on the drive containing your `%temp%` directory.
- **Networking** – Gigabit Ethernet recommended.

Software Requirements

The VI Client is designed for 32-bit versions of the Windows operating systems.

The VI Client requires the Microsoft .NET 2.0 Framework. If your system doesn't have it installed, the VI Client installer automatically installs it.

Installing the VI Client on Windows

This section describes how to install the VI Client by using the VMware Infrastructure Management Installer CD-ROM.

To install a VI Client on Windows

1 As Administrator on the Windows system, insert the installation CD-ROM.

2 Choose a language for the installer and click **OK**.

3 When the VMware Infrastructure Management Installer screen is displayed, click **Next**.

VMware Infrastructure Management
Welcome to the InstallShield Wizard for VMware Infrastructure Management
The InstallShield(R) Wizard will install VMware Infrastructure Management software on your computer. To continue, click Next.
VMware Infrastructure Management
WARNING: This program is protected by copyright law and international treaties.
< Back
Next >
Cancel

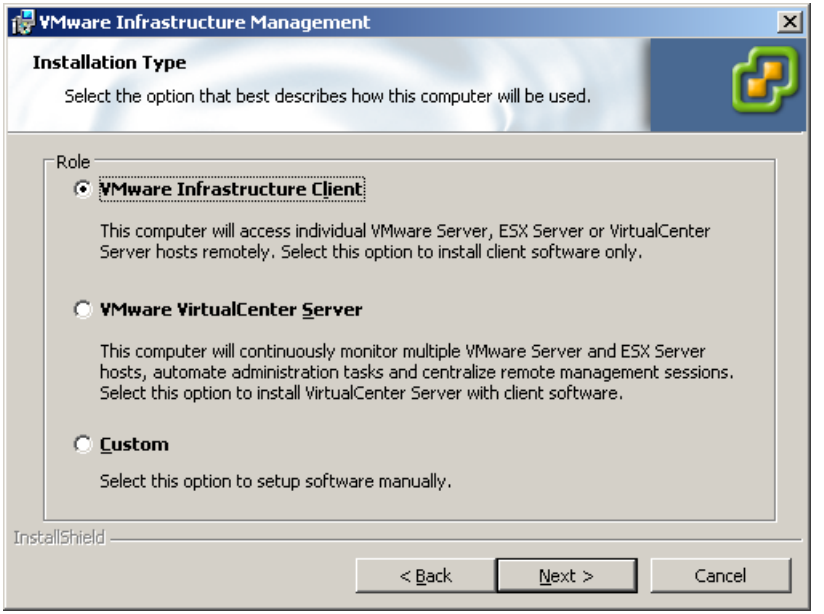
If the VMware Infrastructure Management Installer screen is not displayed, double-click the autorun.exe icon, and click **Next**.

4 Click **Next**. The license agreement appears.

5 Select **I accept the terms in the license agreement**, and click **Next**. The Customer Information page appears.

6 Type your user name and company name, and click **Next**. The Installation Type page appears.

7 Select **VMware Infrastructure Client**.


VMware Infrastructure Management
Installation Type
Select the option that best describes how this computer will be used.
Role
VMware Infrastructure Client
This computer will access individual VMware Server, ESX Server or VirtualCenter Server hosts remotely. Select this option to install client software only.
VMware VirtualCenter Server
This computer will continuously monitor multiple VMware Server and ESX Server hosts, automate administration tasks and centralize remote management sessions. Select this option to install VirtualCenter Server with client software.
Custom
Select this option to setup software manually.
InstallShield
< Back
Next >
Cancel

8 Click **Next**. The Installation Summary page appears.

9 Click **Install** to begin the installation.

Installation might take several minutes. Multiple progress bars appear during installation of the selected components.

10 Click **Finish** to complete the installation.

Starting the VI Client and Logging On to ESX Server 3i

After you install the VI Client, you can connect to your ESX Server 3i host.

To start a VI Client session

1 Launch the VI Client.

Double-click a shortcut or choose the application through **Start > Programs > VMware > VMware Infrastructure Client**.

The VI Client log on window appears.

VMware Infrastructure Client
vmware
VMware Infrastructure Client
To directly manage a single host, enter the IP address or host name.
To manage multiple hosts, enter the IP address or name of a VirtualCenter Server.
IP address / Name:
User name:
Password:
Login
Close
Help

2 Log on to your ESX Server as the administrator.

a Enter the IP address or host name you noted earlier.

b Enter the username **root**.

c Enter the password you specified using the direct console. If you did not set the password using the direct console, leave the **Password** field empty.

3 Click **Login**. A security warning appears.

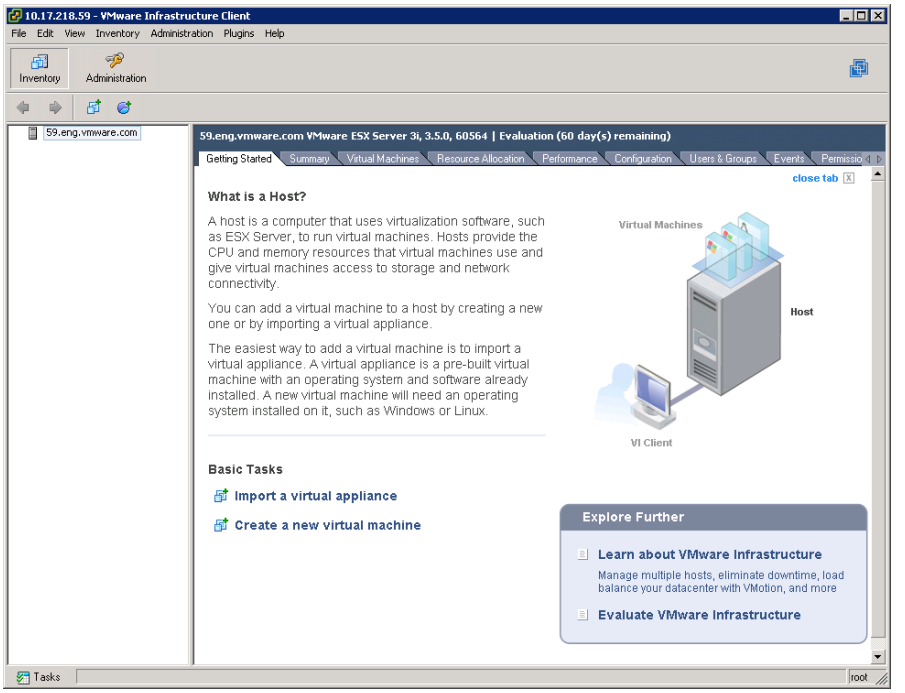
4 To continue, click **Ignore**.

This security warning message occurs because the VI Client detected a certificate signed by the ESX Server 3i host itself (default setting). For highly secure environments, certificates generated by trusted third-party are recommended. You can set up third party certificates later.

Adding Your First Virtual Machine by Importing a Virtual Appliance

After you connect to your host machine, you can add a virtual machine to the host. There are several ways to add virtual machines to hosts. You can build a new virtual machine or import a virtual appliance (a prebuilt virtual machine) from the VMware Web site. The VI Client **Getting Started** tab, shown in Figure 2, contains a "What is a Host?" section that provides steps to guide you through both options. If this is your first virtual machine, VMware recommends you import a virtual machine that has an operating system already installed and is ready to use.

Figure 2. "What is a host?" Tab


10.17.218.59 - VMware Infrastructure Client
File Edit View Inventory Administration Plugins Help
Inventory
Administration
59.eng.vmware.com
59.eng.vmware.com VMware ESX Server 3i, 3.5.0, 60564 | Evaluation (60 day(s) remaining)
Getting Started Summary Virtual Machines Resource Allocation Performance Configuration Users & Groups Events
close tab
What is a Host?
A host is a computer that uses virtualization software, such as ESX Server, to run virtual machines. Hosts provide the CPU and memory resources that virtual machines use and give virtual machines access to storage and network connectivity.
You can add a virtual machine to a host by creating a new one or by importing a virtual appliance.
The easiest way to add a virtual machine is to import a virtual appliance. A virtual appliance is a pre-built virtual machine with an operating system and software already installed. A new virtual machine will need an operating system installed on it, such as Windows or Linux.
Virtual Machines
Host
VI Client
Basic Tasks
Import a virtual appliance
Create a new virtual machine
Explore Further
Learn about VMware Infrastructure
Manage multiple hosts, eliminate downtime, load balance your datacenter with VMotion, and more
Evaluate VMware Infrastructure
Tasks
root

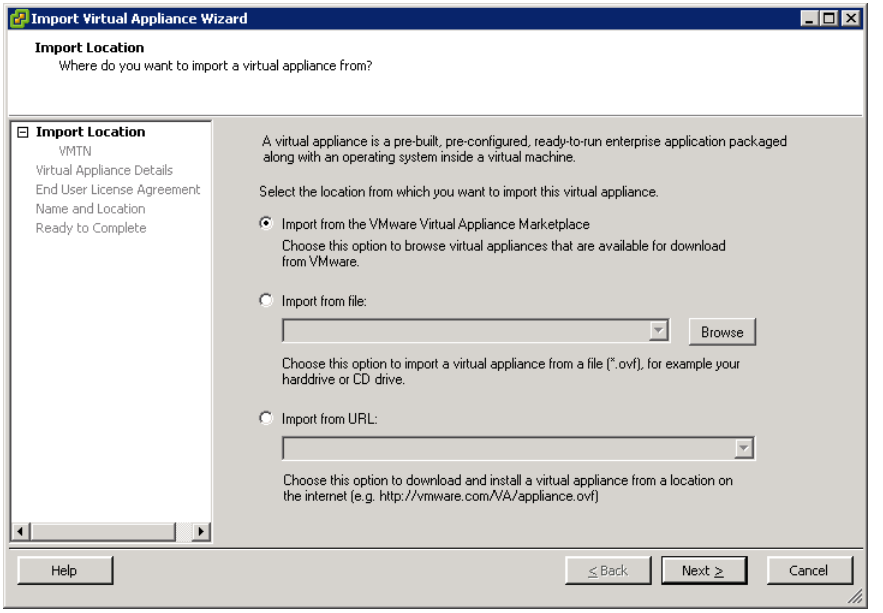
A virtual appliance is a prebuilt virtual machine with an operating system and applications already installed. The following procedure guides you through the steps to import a virtual machine.

To import a virtual appliance

1 In the Inventory panel, make sure the host machine is selected.

2 Click **Import a virtual appliance**.

The Import Virtual Appliance wizard appears.


Import Virtual Appliance Wizard
Import Location
Where do you want to import a virtual appliance from?
Import Location
VMTN
Virtual Appliance Details
End User License Agreement
Name and Location
Ready to Complete
A virtual appliance is a pre-built, pre-configured, ready-to-run enterprise application packaged along with an operating system inside a virtual machine.
Select the location from which you want to import this virtual appliance.
Import from the VMware Virtual Appliance Marketplace
Choose this option to browse virtual appliances that are available for download from VMware.
Import from file:
Browse
Choose this option to import a virtual appliance from a file (*.ovf), for example your harddrive or CD drive.
Import from URL:
Choose this option to download and install a virtual appliance from a location on the internet (e.g. http://vmware.com/VA/appliance.ovf)
Help
< Back
Next >
Cancel

3 Select **Import from the VMware Virtual Appliance Marketplace**.

4 Click **Next**. The VMTN Virtual Appliances import page appears.

5 Select a virtual appliance from the list of options.

NOTE For the shortest download time, VMware recommends that you chose a virtual appliance that is small in size.

---

6 Click **Next** and follow the on-screen instructions to import the virtual appliance.

After you import the virtual appliance, explore its functionality by powering it on and viewing it trough the Console tab on the VI Client. To release the cursor from the Console, press Control+Alt simultaneously. To view the Console in full screen mode, from the Inventory, right-click the virtual machine and select **Open Console**.

Congratulations! At this point you have run your first virtual machine on ESX Server 3i. You can import or create one or more virtual machines on a single ESX Server host.

Managing Multiple ESX Server 3i Hosts in Your Datacenter

Now that you've explored a virtual machine on the ESX Server 3i host, you can deploy a VirtualCenter Server to manage multiple hosts at the same time. Managing multiple hosts through a VirtualCenter Server allows you to experiment with advanced management options, such as resource sharing, and all the other options available within the VMware Infrastructure environment.

The VMware Infrastructure Management Installer CD-ROM is included in the VMware packaging accompanying your physical server. Use the CD-ROM to install a VirtualCenter Server on the computer that will be used as a management station.

For production use, VMware recommends that the VirtualCenter Server be installed on a dedicated server system. However, for the purpose of this exercise, it can be installed on a desktop or laptop and managed remotely through the VI Client. VirtualCenter Server must be installed on a Windows machine that has network access to the ESX Server 3i host.

Before You Begin

The VirtualCenter Server requires a database. VirtualCenter Server uses Microsoft SQL Server 2005 Express for small deployments with up to 5 hosts and 50 virtual machines. Before you begin, make sure your system meets the hardware and software requirements. For larger deployments, VMware supports several Oracle and Microsoft SQL Server databases. For information about supported databases, see the *ESX Server 3i Installable Setup Guide*.

Hardware Requirements

The VirtualCenter Server hardware must meet the following requirements:

- **Processor** – 2.0GHz or higher Intel or AMD x86 processor. Processor requirements can be larger if your database is run on the same hardware.
- **Memory** – 2GB RAM minimum. RAM requirements can be larger if your database is run on the same hardware.
- **Disk storage** – 560MB minimum, 2GB recommended. You must have 245MB free on the destination drive for installation of the program, and you must have 315MB free on the drive containing your `%temp%` directory.

- **Microsoft SQL Server 2005 Express disk requirements** – The database requires up to 2GB free disk space to decompress the installation archive. However, approximately 1.5GB of these files are deleted after the installation is complete.
- **Networking** – Gigabit Ethernet recommended.

Software Requirements

The VirtualCenter Server is supported as a service on the 32-bit versions of the Windows operating systems.

The VI Client is designed for 32-bit versions of the Windows operating systems.

NOTE The VI Client requires the Microsoft .NET 2.0 Framework. If your system doesn't have it installed, the VI Client installer automatically installs it.

The VirtualCenter installer requires Internet Explorer 5.5 or higher to run.

Installing the VirtualCenter Server

This section describes how to install the VirtualCenter Server using the VMware Infrastructure Management Installer CD-ROM. A wizard guides you through the installation of both the VirtualCenter Server and the VI Client.

To install VMware VirtualCenter Server

1 As Administrator on the Windows system, insert the installation CD-ROM.

2 Choose a language for the installer and click **OK**.

3 When the VMware Infrastructure Management Installer screen displays, click **Next**.

VMware Infrastructure Management
Welcome to the InstallShield Wizard for VMware Infrastructure Management
The InstallShield(R) Wizard will install VMware Infrastructure Management software on your computer. To continue, click Next.
WARNING: This program is protected by copyright law and international treaties.
VMware Infrastructure Management
< Back
Next >
Cancel

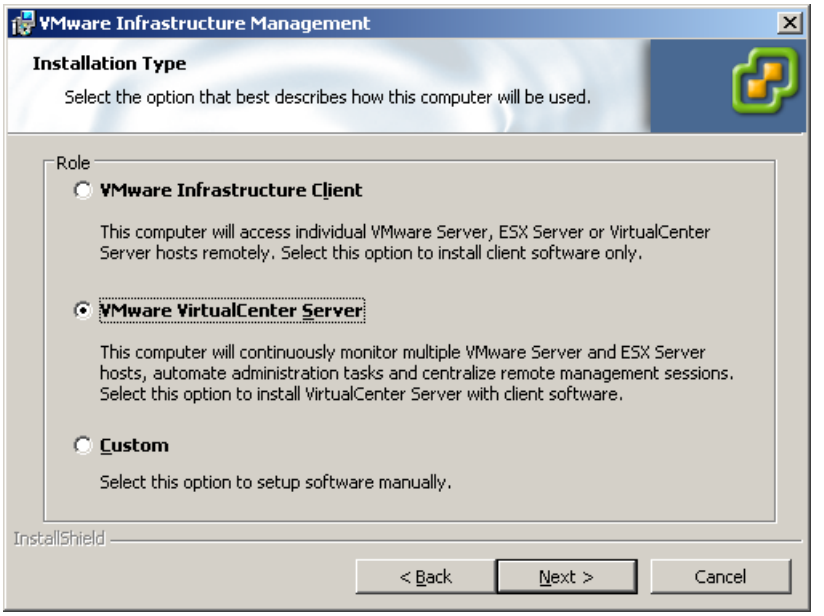
If the VMware Infrastructure Management Installer screen is not displayed, double-click the autorun.exe icon, and click **Next**.

4 Click **Next**. The license agreement appears.

5 Select **I accept the terms in the license agreement**, and click **Next**. The Customer Information page appears.

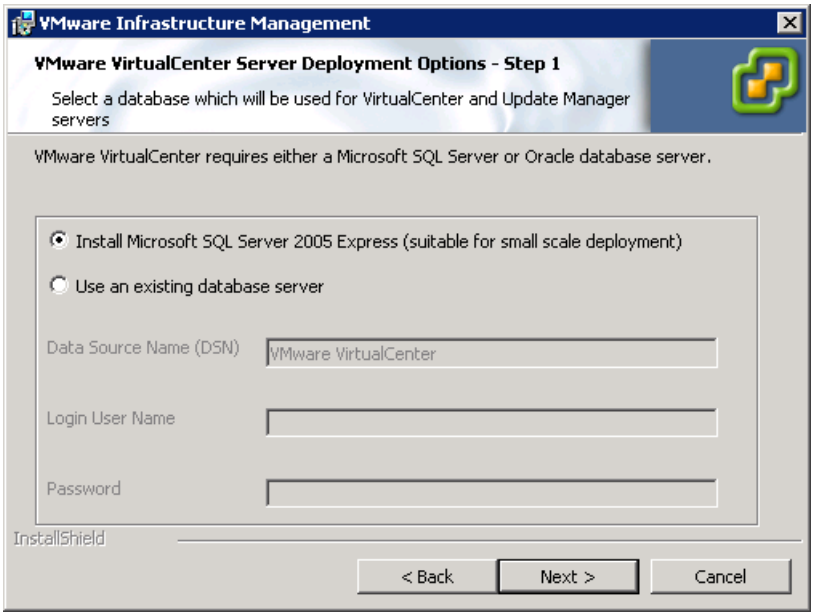
6 Type your user name and company name, and click **Next**. The Installation Type page appears.

7 On the Installation Type, select **VMware VirtualCenter Server**.


VMware Infrastructure Management
Installation Type
Select the option that best describes how this computer will be used.
Role
VMware Infrastructure Client
This computer will access individual VMware Server, ESX Server or VirtualCenter Server hosts remotely. Select this option to install client software only.
VMware VirtualCenter Server
This computer will continuously monitor multiple VMware Server and ESX Server hosts, automate administration tasks and centralize remote management sessions. Select this option to install VirtualCenter Server with client software.
Custom
Select this option to setup software manually.
InstallShield
< Back
Next >
Cancel

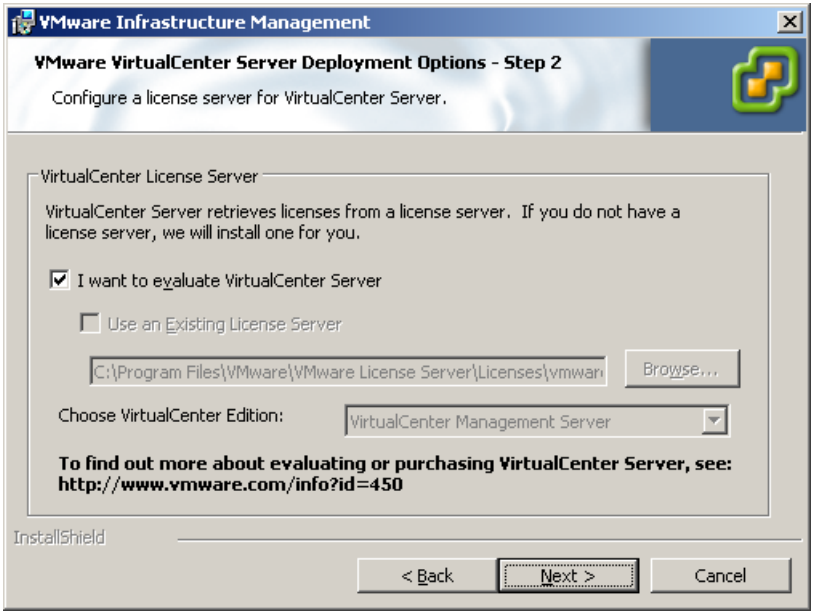
8 Click **Next**. The database selection page appears.

9 On the database selection page, select **Install Microsoft SQL Server 2005 Express (suitable for small scale deployment)**. The VMware Infrastructure Management Installer installs Microsoft SQL Server 2005 Express database for you.


VMware Infrastructure Management
VMware VirtualCenter Server Deployment Options - Step 1
Select a database which will be used for VirtualCenter and Update Manager servers
VMware VirtualCenter requires either a Microsoft SQL Server or Oracle database server.
Install Microsoft SQL Server 2005 Express (suitable for small scale deployment)
Use an existing database server
Data Source Name (DSN)
VMware VirtualCenter
Login User Name
Password
InstallShield
< Back
Next >
Cancel

10 Click **Next**. The License Server page appears.

11 On the License Server page, check the **I want to evaluate VirtualCenter Server** check box if you want to use the VirtualCenter Server in evaluation mode.


VMware Infrastructure Management
VMware VirtualCenter Server Deployment Options - Step 2
Configure a license server for VirtualCenter Server.
VirtualCenter License Server
VirtualCenter Server retrieves licenses from a license server. If you do not have a license server, we will install one for you.
I want to evaluate VirtualCenter Server
Use an Existing License Server
C:\Program Files\VMware\VMware License Server\Licenses\vmwar
Browse...
Choose VirtualCenter Edition:
VirtualCenter Management Server
To find out more about evaluating or purchasing VirtualCenter Server, see:
http://www.vmware.com/info?id=450
InstallShield
< Back
Next >
Cancel

If you choose this option, the enterprise-level edition of VirtualCenter is installed in evaluation mode. The VMware License Server is also installed so that you can switch to licensed mode during or after the evaluation period.

NOTE If you already have a VirtualCenter license, you can install it on the license server later.

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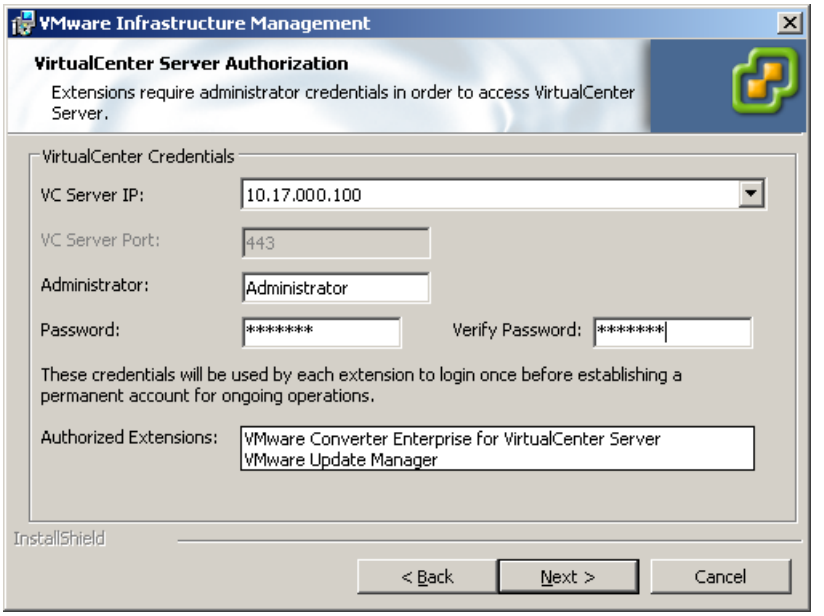
12 Click **Next**. The VirtualCenter Credentials page appears.



13 Enter the administrator name and password you use when you log in to the system on which you are installing the VirtualCenter Server. You need the user name and password entered here to log in to the VirtualCenter Server after you have installed it.

14 Click **Next**. The Installation Summary page appears.

15 Click **Install** to begin the installation.

Installation might take several minutes as each VirtualCenter Server component installs. Multiple progress bars appear during installation.

16 For each component that you install, accept the default port and proxy information shown on screen. If another service is already using the defaults, specify alternative port and proxy information.

17 Click **Next** to continue through the screens.

18 Click **Finish** to complete the VirtualCenter Server installation.

After you have completed the installation, use the VI Client to connect to the VirtualCenter Server.

Starting the VI Client and Logging in to the VirtualCenter Server

Connect to the VirtualCenter Server with the VI Client. When you connect to a VirtualCenter Server, you can manage the VirtualCenter Server as well as all of the hosts and virtual machines being managed by it.

To start a VI Client session

1 Launch the VI Client.

Double-click a shortcut or choose the application through **Start > Programs > VMware > VMware Infrastructure Client**.

The VI Client log in window appears.

VMware Infrastructure Client
vmware
VMware Infrastructure Client
To directly manage a single host, enter the IP address or host name.
To manage multiple hosts, enter the IP address or name of a VirtualCenter Server.
IP address / Name:
User name:
Password:
Login
Close
Help

2 Log in to the VirtualCenter Server as the administrator.

a Enter the IP address or VirtualCenter Server name.

b Enter your Windows administrator user name.

c Enter your Windows administrator password.

3 Click **Login**.

After you connect to the VirtualCenter Server with the VI Client, create a datacenter.

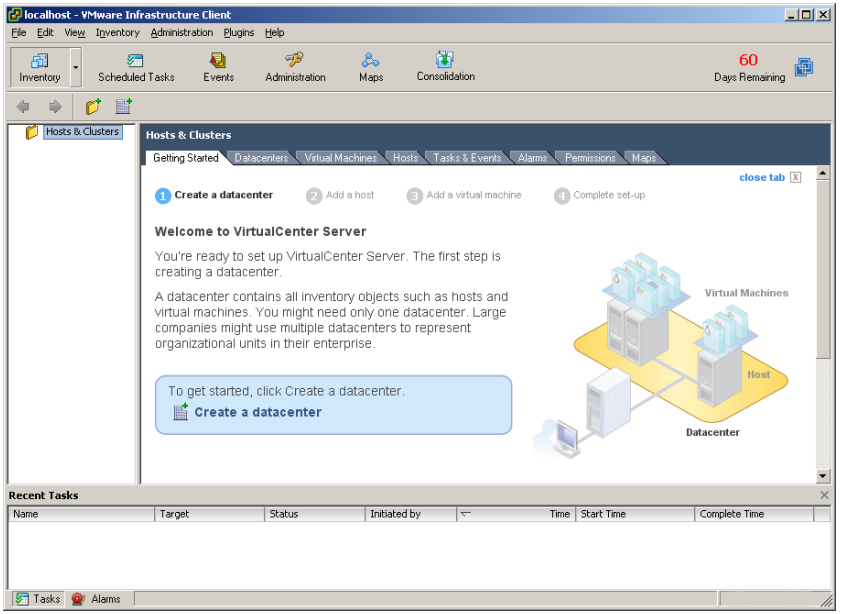
Creating a Datacenter

You just connected to the VirtualCenter Server using the VI Client. If you are logging in for the first time, you should have no inventory items in the Inventory panel.

The first step in setting up your VMware Infrastructure environment is to create a datacenter.

To create a datacenter

1 Select the root node folder **Hosts & Clusters** in the Inventory panel.



2 Follow the on-screen instructions in the Getting Started tab in the Information panel, and click **Create a datacenter**.

This creates a datacenter.

3 Name the datacenter by selecting it and entering a name.

After you create a datacenter, add the ESX Server 3i host to it.

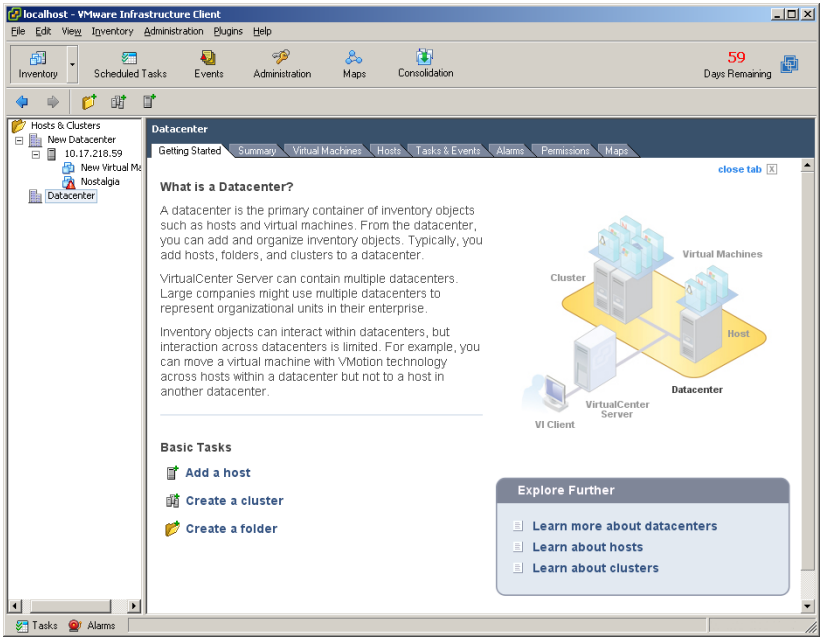
Adding a Host

You just created a datacenter. Now add your ESX Server 3i host. When you add your host to a datacenter, you bring it under VirtualCenter management.

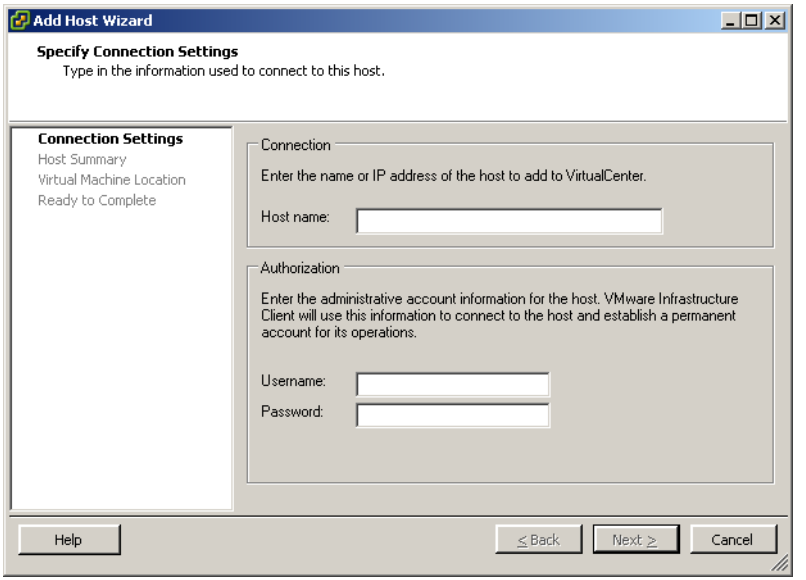
To add a host

1 In the Inventory panel, select the datacenter you just created.

2 Follow the on-screen instructions in the Getting Started tab, and click **Add a host**.



The Add Host wizard appears.


Add Host Wizard
Specify Connection Settings
Type in the information used to connect to this host.
Connection Settings
Host Summary
Virtual Machine Location
Ready to Complete
Connection
Enter the name or IP address of the host to add to VirtualCenter.
Host name:
Authorization
Enter the administrative account information for the host. VMware Infrastructure Client will use this information to connect to the host and establish a permanent account for its operations.
Username:
Password:
Help
< Back
Next >
Cancel

a Type the IP address or name of the ESX Server 3i host in the Host name field.

b Enter the Username and Password for a user account that has administrative privileges on the selected managed host.

3 Click **Next**. The Host Summary page appears.

4 To confirm the Host Summary information, click **Next**. The Configure Lockdown Mode page appears.

5 (Optional) Select **Enable Lockdown Mode** to disable remote access for the administrator account after VirtualCenter takes control of this host. Selecting this check box ensures that the host is managed only through VirtualCenter with root privileges.

6 Click **Next**. The Virtual Machine Location page appears.

7 Select a location from the list of inventory objects.

8 Click **Next**. The Ready to Complete summary page appears.

9 To confirm completing the Add Host wizard, click **Finish**.

The VI Client displays a progress bar in the Recent Tasks pane while the host is added. Adding a new host may take a few minutes and the Status percentage may appear to pause at different increments during the process.

When a new host is added, the host may appear as “disconnected” until VirtualCenter completes the task. After the host is added, the status changes to “connected,” indicating that the host connection is complete.

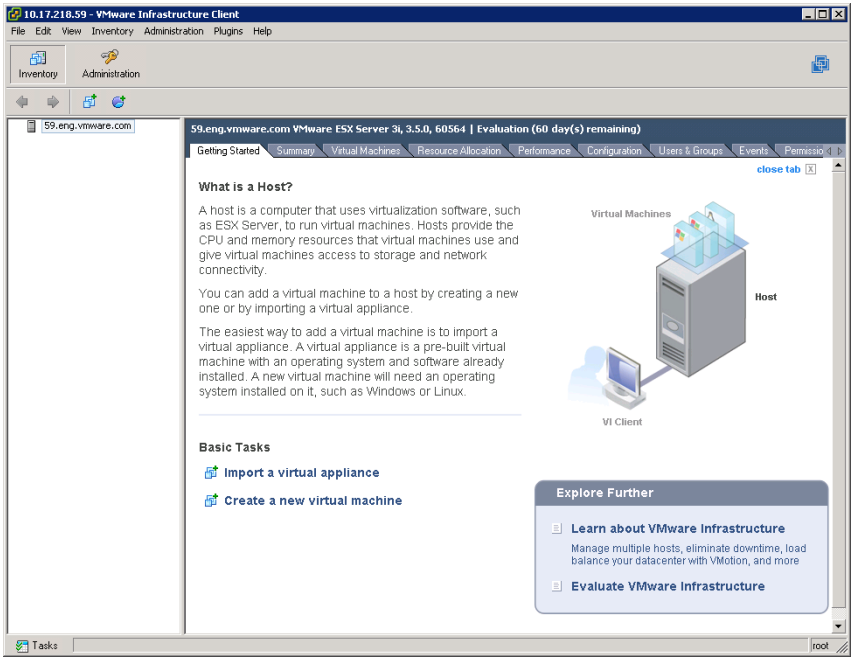
You just added your host to the VirtualCenter Inventory. Now you can import a virtual appliance or create a new virtual machine from scratch.

Creating a Virtual Machine

Creating a new virtual machine is like building a computer. After you have finished, you must install a guest operating system, applications, and VMware Tools on it. Make sure that you have an ISO image and a license for the operating system you want to install on the virtual machine.

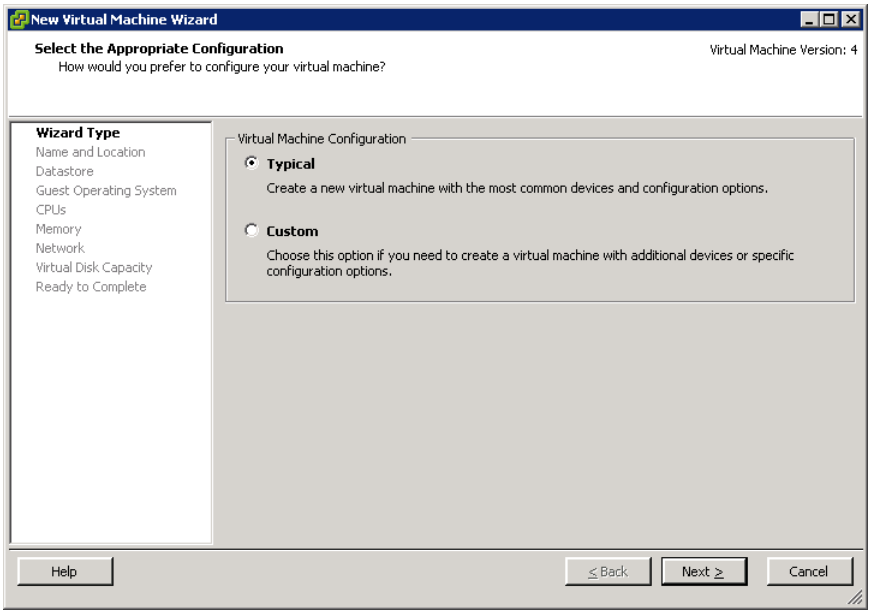
To create a virtual machine

1 In the Inventory panel, select the host machine.


10.17.218.59 - VMware Infrastructure Client
File Edit View Inventory Administration Plugins Help
Inventory
Administration
59.eng.vmware.com
59.eng.vmware.com VMware ESX Server 3i, 3.5.0, 60564 | Evaluation (60 day(s) remaining)
Getting Started Summary Virtual Machines Resource Allocation Performance Configuration Users & Groups Events
close tab
What is a Host?
A host is a computer that uses virtualization software, such as ESX Server, to run virtual machines. Hosts provide the CPU and memory resources that virtual machines use and give virtual machines access to storage and network connectivity.
You can add a virtual machine to a host by creating a new one or by importing a virtual appliance.
The easiest way to add a virtual machine is to import a virtual appliance. A virtual appliance is a pre-built virtual machine with an operating system and software already installed. A new virtual machine will need an operating system installed on it, such as Windows or Linux.
Virtual Machines
Host
VI Client
Basic Tasks
Import a virtual appliance
Create a new virtual machine
Explore Further
Learn about VMware Infrastructure
Manage multiple hosts, eliminate downtime, load balance your datacenter with VMotion, and more
Evaluate VMware Infrastructure
Tasks
root

2 Click **Create a new virtual machine**.

The Create New Virtual Machine wizard appears.



3 Select **Typical**, and click **Next**.

4 Type a virtual machine name, and click **Next**.

5 Select a datastore in which to store the virtual machine files, and click **Next**.

You should choose a datastore large enough to hold the virtual machine and all of its virtual disk files.

6 Under **Guest Operating System**, select the operating system family (Microsoft Windows, Linux, Novell NetWare, Solaris, or other). This is the operating system for your virtual machine. Your choice should be based on your planned use of the virtual machine.

NOTE The wizard does not install the guest operating system for you. The New Virtual Machine Wizard uses this information to select appropriate default values, such as the amount of memory needed.

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7 Select the number of virtual processors in the virtual machine from the pull-down list, and click **Next**.

8 Configure the virtual machine's memory size by selecting the number of megabytes.

The minimum, recommended, maximum for best performance, and maximum sizes are based on the guest operating system. Regardless of the guest operating system, the minimum memory size is 4MB.

9 Click **Next**.

10 Choose the networks to connect to and their options by selecting how many network adapters (NICs) you want to connect to, the names of the networks, and whether you want to connect to them at power on.

The network pull-down menu lists the port groups that are configured for virtual machine use on the host. If no virtual machine port groups are configured, a warning dialog box appears, and you are not allowed to configure any virtual network cards.

11 Click **Next**.

12 Specify the size of the virtual disk.

Enter the disk size in megabytes (MB) or gigabytes (GB). The default is 4GB. The virtual disk must be large enough to hold the guest operating system and all the software that you intend to install with room for data and growth.

13 Click **Next.**

14 On the Ready to Complete New Virtual Machine page, review your selections and click **Finish** to create the new virtual machine.

After you have created the new virtual machine, install a guest operating system and VMware Tools on it. You can find instructions on installing a guest operating system and VMware Tools in the VMware Infrastructure Tutorial accessible from the VI Client. Select the virtual machine and follow the links in the Getting Started tab to learn how to install an operating system.

Where to Go Next

Congratulations! You have now set up your VMware Infrastructure environment. From here, you can:

- Expand your capacity by adding more hosts and storage.
- Expand your virtual datacenter by creating and importing new virtual machines.
- Perform a consolidation of your physical servers using the Consolidation Wizard.

For more information on how to evaluate the many features and benefits of VMware Infrastructure, go to http://www.vmware.com/go/vi_evalresources.

VMware Infrastructure Tutorial

To learn more about VMware Infrastructure 3 components and tasks, refer to the VMware Infrastructure Tutorial. You can access the tutorial by clicking the **Explore Further** links on the Getting Started tabs or by choosing **Help > Tutorial** in the VI Client.

VMware Infrastructure Documentation

The VMware Infrastructure documentation consists of the combined VirtualCenter and ESX Server 3i Installable documentation set. You can access the most current versions of this manual and other books by going to http://www.vmware.com/support/pubs.